	Application No.	Applicant(s)
Notice of Allowability	09/784,512	PLATT, DAVID C.
	Examiner	Art Unit	
	Longbit Chai	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *interview on 7-26-2005*.

2. ☒ The allowed claim(s) is/are *1-8,18-24 and 27-39*.

3. ☒ The drawings filed on *2/14/2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

1   **DETAILED ACTION**

2

3   ***Examiner's Amendment***

4   An examiner's amendment to the record appears below. Should the changes

5   and/or additions be unacceptable to applicant, an amendment may be filed as

6   provided by 37 CFR 1.312. To ensure consideration of such an amendment, it

7   MUST be submitted no later than the payment of the issue fee.

8

9   Authorization for this examiner's amendment was given in a telephone

10   interview with Kirk D. Wong (Reg. No. 43,284) on 7/26/05.

11

12   This application has been amended as follows:

13   IN THE CLAIMS

14   Cancel claims 9 – 17 and 25 – 26 without prejudice.

15   Replace claims 1, 2, 3, 5, 6,19 as follows.

16   Add claims 27 – 39 as follows.

17

18   1.   (Currently Amended)   A process for generation, delivery, and validation

19   of electronic coupons via a telecommunication system, comprising the sub-

20   processes of:

21   generating a unique coupon authentication number for each of a plurality of

22   receiving devices;

23   delivering an electronic offer ID to one or more receiving devices;

24   wherein a receiving device generates a coupon ID number using the

25   receiving device's coupon authentication number and the offer ID;

26   validating said coupon ID number when a user redeems said coupon ID

27   number using the receiving device's coupon authentication number;

28   wherein said telecommunication system includes a service center, a plurality

29   of receiving devices, a display device coupled to each receiving device, a

30   communication channel connecting said service center and each receiving device;

31   wherein said service center comprises <u>at least</u> ~~an activation database,~~ an

32   authentication number database and a key server;

33   wherein said receiving device comprises a persistent storage device which

34   stores one or more public keys assigned to said receiving device, and a crypto-chip

35   which stores one or more private keys assigned to said receiving device[[.]] <u>;</u>

36   <u>submitting said offer ID number, said receiving device's serial number, and</u>

37   <u>said coupon ID number to a vendor by the user that redeems said coupon;</u>

38   <u>entering said offer ID number, said receiving device's serial number, and</u>

39   <u>said coupon ID number by said vendor who accesses said service center;</u>

40   <u>checking, by said key server, said receiving device's authentication number</u>

41   <u>from said authentication number database;</u>

42   <u>performing a hash function on said offer ID number using said receiving</u>

43   <u>device's authentication number as a key;</u>

44   <u>taking the first N digits of the hashed result and comparing the N-digit</u>

45   <u>number with said coupon ID number submitted by the user; and</u>

46   <u>validating said coupon if said N-digit number matches with said coupon ID</u>

47   <u>number.</u>

1   2.   (Currently Amended)   The process according to Claim 1, wherein the

2   sub-process of generating a coupon authentication number for each receiving

3   device comprises the steps of:

4   activating a receiving device;

5   ~~generating a unique coupon authentication number for each receiving device,~~

6   wherein said coupon authentication number is randomly generated and can be of

7   any length of bits;

8   saving said <u>coupon</u> authentication number in said authentication number

9   database;

10   communicating said coupon authentication number to said key server;

11   encrypting said coupon authentication number; and

12   sending <u>said</u> encrypted coupon authentication number to a receiving device

13   which adds said encrypted authentication number to said receiving device's keyring

14   as a coupon key.

1   3.   (Currently Amended)   The process according to Claim 2, wherein said

2   step of encrypting said coupon authentication number is performed by said key

3   server using said receiving device's public key which is stored both in ~~said~~ <u>an</u>

4   activation database and said receiving device's persistent storage device.

1   5.   (Currently Amended)   The process according to Claim 1, wherein the

2   sub-process of [[a]] delivering <u>an electronic offer ID</u> ~~cryptographic coupon~~ to one or

3   more receiving devices, comprising the steps of:

4   receiving an order from a client to issue an electronic coupon, which is an

5   offer to sell a specific product or service;

6   confirming an offer ID number for said coupon;

7   sending coupon information to said display device through said receiving

8   device;

9   performing a hash operation by said <u>receiving device's</u> crypto-chip on said

10   offer ID number using said encrypted coupon authentication number if a user

11   decides to accept said offer; and

12   displaying the first N digits of the hashed result as a coupon ID number, with

13   which, together with said offer ID number and said receiving device's serial number,

14   the user may redeem said coupon.

1   6.   (Currently Amended)   The process according to Claim 5, wherein said

2   step of confirming a<u>n</u> ~~unique~~ offer ID number for said coupon comprises the sub-

3   steps of:

4   checking whether or not said client has designated a unique offer ID number

5   for said coupon;

6   wherein if said client has designated a unique offer ID number for said

7   coupon, checking the uniqueness of said offer ID number and resolving possible

8   collisions with other offers; and

9   wherein if said client has not designated a unique offer ID number for said

10   coupon, generating a unique offer ID number for said coupon.

1   9-17. (Canceled)

1   19.   (Currently Amended)   The system according to Claim 18, wherein said

2   receiving device is a ~~personal~~ digital video recorder ~~and said display device is a TV~~

3   ~~set~~.

1
1   25-26. (Canceled)

1   27.   (New) The system according to Claim 18, wherein said display device is a

2   TV monitor.

1   28.   (New) The process according to Claim 1, wherein said receiving device is a

2   digital video recorder.

1   29.   (New) The process according to Claim 1, wherein said display device is a TV

2   monitor.

1   30.   (New) The process according to Claim 1, wherein said communication

2   channel can be a telephone modem, or a cable modem, or a local area

3   network.

1 31.   (New) An apparatus for generation, delivery, and validation of electronic

2 coupons via a telecommunication system, comprising:

3   a coupon generation module, wherein said coupon generation module

4 generates a unique coupon authentication number for each of a plurality of

5 receiving devices;

6   a delivery module, wherein said delivery module delivers an electronic offer

7 ID to one or more receiving devices;

8   wherein a receiving device generates a coupon ID number using the

9 receiving device's coupon authentication number and the offer ID;

10   a validation module, wherein said validation module validates said coupon ID

11 number when a user redeems said coupon ID number using the receiving device's

12 coupon authentication number;

13   wherein said telecommunication system includes a service center, a plurality

14 of receiving devices, a display device coupled to each receiving device, a

15 communication channel connecting said service center and each receiving device;

16   wherein said service center comprises at least an authentication number

17 database and a key server;

18   wherein said receiving device comprises a persistent storage device which

19 stores one or more public keys assigned to said receiving device, and a crypto-chip

20 which stores one or more private keys assigned to said receiving device;

21   a submission module, wherein said submission module submits said offer ID

22   number, said receiving device's serial number, and said coupon ID number to a

23   vendor by the user that redeems said coupon;

24   an entry module, wherein said entry module accepts entry, by said vendor

25   who accesses said service center, said offer ID number, said receiving device's

26   serial number, and said coupon ID number;

27   a checking module, wherein said checking module checks, by said key

28   server, said receiving device's authentication number from said authentication

29   number database;

30   a hash module, wherein said hash module performs a hash function on said

31   offer ID number using said receiving device's authentication number as a key;

32   a comparison module, wherein said comparison module takes the first N

33   digits of the hashed result and compares the N-digit number with said coupon ID

34   number submitted by the user; and

35   a validation module, wherein said validation module validates said coupon if

36   said N-digit number matches with said coupon ID number.

1   32.   (New) The apparatus according to Claim 31, wherein the coupon generation

2   module further comprises:

3   a receiving device activation module, wherein said receiving device activation

4   module activates a receiving device;

5   wherein said coupon authentication number is randomly generated and can be

6   of any length of bits;

7   a coupon authentication number saving module, wherein said coupon

8   authentication number saving module saves said coupon authentication number in

9   said authentication number database;

10   a coupon authentication number communication module, wherein said coupon

11   authentication number communication module communicates said coupon

12   authentication number to said key server;

13   an encrypting module, wherein said encrypting module encrypts said coupon

14   authentication number; and

15   a encrypted coupon authentication number sending module, wherein said

16   encrypted coupon authentication number sending module sends said encrypted

17   coupon authentication number to a receiving device which adds said encrypted

18   authentication number to said receiving device's keyring as a coupon key.

1   33.   (New) The apparatus according to Claim 32, wherein said encrypting module

2   is performed on said key server using said receiving device's public key which is

3   stored both in an activation database and said receiving device's persistent storage

4   device.

1   34.   (New) The apparatus according to Claim 32, further comprising:

2   an embedding module, wherein said embedding module embeds a date or

3   time stamp in said coupon key for convenience to replace said authentication

4   number whenever said authentication number database is compromised.

1   35.   (New) The apparatus according to Claim 31, wherein the delivery module

2   further comprises:

3   an order receiving module, wherein said order receiving module receives an

4   order from a client to issue an electronic coupon, which is an offer to sell a specific

5   product or service;

6   a confirming module, wherein said confirming module confirms an offer ID

7   number for said coupon;

8   a coupon sending module, wherein said coupon sending module sends

9   coupon information to said display device through said receiving device;

10   an offer ID number hashing module, wherein said offer ID number hashing

11 module performs a hash operation by said receiving device's crypto-chip on said

12 offer ID number using said encrypted coupon authentication number if a user

13 decides to accept said offer; and

14   a display module, wherein said display module displays the first N digits of

15 the hashed result as a coupon ID number, with which, together with said offer ID

16 number and said receiving device's serial number, the user may redeem said

17 coupon.

1   36.   (New) The apparatus according to Claim 35, wherein said confirming module

2   further comprises:

3   an offer ID number checking module, wherein said offer ID number checking

4   module checks whether or not said client has designated a unique offer ID number

5   for said coupon;

6   wherein if said client has designated a unique offer ID number for said

7   coupon, said offer ID number checking module checks the uniqueness of said offer

8   ID number and resolves possible collisions with other offers; and

9   wherein if said client has not designated a unique offer ID number for said

10   coupon, said offer ID number checking module generates a unique offer ID number

11   for said coupon.

12

13   37.   (New) The apparatus according to Claim 31, wherein said receiving device is

14   a digital video recorder.

15   38.   (New) The apparatus according to Claim 31, wherein said display device is a

16   TV monitor.

17   39.   (New) The apparatus according to Claim 31, wherein said communication

18   channel can be a telephone modem, or a cable modem, or a local area network.

Allowable Subject Matter

Claims 1 – 8, 18 – 24 and 27 – 39.

The following is an examiner's statement of reasons for allowance:

The above mentioned claims are allowable over prior arts because the CPA

(Cited Prior Art) of record fails to teach or render obvious the claimed limitations in

combination with the specific added limitations, as recited in independent claim 18 and

subsequent dependent claims.

The CPA does not teach or suggest a system for coupon encryption, distribution,

and validation, comprising:

a plurality of coupons, each of said coupons is designated a unique offer ID

number;

an information service center which comprises an activation database, a coupon

authentication number database, and a key server;

a plurality of service receiving devices, each of which is coupled to a display

device;

a channel through which said information service center and a service receiving

device communicate;

wherein said information service center generates a unique coupon authentication

number for each said service receiving device, wherein said coupon authentication

number is stored in said coupon authentication number database and is communicated

to said key server;

wherein said key server encrypts said coupon authentication number using an encryption algorithm and sends the encrypted coupon authentication number to said service receiving device;

wherein said service receiving device comprises a crypto-chip and a hard drive;

wherein said service receiving device decrypts the encrypted coupon authentication number;

wherein said crypto-chip performs a hash operation on said offer ID number using said coupon authentication number and takes the first or last N digits of the hashed result as a coupon ID number for said coupon; and

wherein said coupon may be validated by said key server, which uses said service receiving device's serial number to look up the coupon authentication number stored in said coupon authentication number database and performs a hash operation on said offer ID number using said coupon authentication number and compares a base number taken from the first or last N digits of the hashed result with said coupon ID number submitted, and validates said coupon if said base number and said coupon number match.

Claims 18, 31 and subsequent dependent claims would also be allowable for the reasons stated above

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
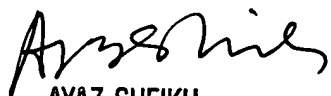
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai
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LB

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